REMARKS

The Examiner is thanked for the thorough examination of the application. A substitute Abstract is provided that is within 50-150 words. No new matter is believed to be added to the application by this Amendment.

Status Of The Claims

Claims 1, 2 and 5-12 are pending in the application. Claims 3 and 4 have been canceled without prejudice or disclaimer of any of the subject matter contained therein. The amendments to claim 1 find support in the specification at page 7, lines 21-23. Claim 5 finds support in the specification at page 19, lines 3-8. Claims 6 and 7 find support in the specification at page 18, lines 4-7. Claims 8 and 9 find support in the specification at page 18, lines 20-25. Claims 10-12 find support in the specification at pages 20 and 21.

Election/Restriction

The Examiner has restricted the claims of the invention into the following two groups:

Group I: Claims 1 and 2, drawn to a rubber composition.

Group II: Claims 3 and 4 (now canceled), drawn to a vulcanizate.

On January 24, 2006, Group I (claims 1 and 2) was provisionally elected with traverse. **Applicants affirm the election of Group I (claims 1 and 2) with traverse.**

As set forth in Section 803 of the MPEP, the Examiner must examine an application on the merits if the examination of the entire application can be made without serious burden. Two criteria are identified for proper requirement for restriction:

1. The inventions must be independent or distinct as claimed; and

2. There must be a serious burden on the Examiner if the restriction is not required.

Applicant respectfully submits that a serious burden has not been placed on the Examiner to consider all of the claims in a single application. A review of the subject matter set forth in the claims would have an overlapping search. Thus a different field of search really does not exist with regard to the claims of the present application.

In this case, claims 3 and 4 of Group II were dependent upon claims 1and 2 of Group I, and a finding of allowability of claims 1 and 2 of Group I would render claims 3 and 4 of Group II instantly allowable. As a result, no undue burden was placed upon the Examiner to examine claims 3 and 4 of Group II.

However, groups 3 and 4 have been canceled without prejudice or disclaimer in order to expedite prosecution of the application.

Rejection Under 35 U.S.C. §103(a) Over Sakata And Peascoe

Claims 1 and 2 are rejected under 35 U.S.C. §103(a) as being obvious over Sakata (U.S. Patent 6,498,223) in view of Peascoe (U.S. Patent 4,202,948). Applicants traverse.

The present invention pertains to a rubber composition that can produce a vulcanizate having excellent ozone resistance, flexing fatigue and oil resistance. As is typically set forth in

claim 1 of the present invention, the rubber composition is formed from α,β-ethylenically unsaturated nitrile-conjugated diene copolymer rubber (A) having number average molecular weight of 50,000 to 150,000, and a content of α,β-ethylenically unsaturated nitrile monomer units of 28 to 50 wt%, α,β-ethylenically unsaturated nitrile-conjugated diene copolymer rubber (B) having number average molecular weight of 1,000 to 20,000, ethylene-α-olefin copolymer rubber (C), and a graft copolymer (D). The graft copolymer (D) is obtained by performing graft copolymerization on a mixture of an aromatic vinyl compound and an α,β-ethylenically unsaturated nitrile monomer with an ethylene-propylene-unconjugated copolymer, and a content of structure units of the ethylene-propylene-unconjugated copolymer is 20 to 70 wt%. A ratio of the graft copolymer (D) with respect to 100 parts by weight in total of said rubber (A), rubber (B) and rubber (C) is 1 to 30 parts by weight. Also, a composition ratio of the rubber (A), rubber (B) and rubber (C) is

rubber (A): 20 to 79 wt%,

rubber (B): 1 to 30 wt%, and

rubber (C): 20 to 50 wt%.

Sakata pertains to unsaturated nitrile-conjugated diene-type rubber compositions. Sakata fails to disclose or suggest a rubber composition that is formed from α,β-ethylenically unsaturated nitrile-conjugated diene copolymer rubber (A) having a content of α,β-ethylenically unsaturated nitrile monomer units of 28 to 50 wt%.

Sakata at column 5, lines 1-2 describes using a monomer (a) that can by acrylonitrile or methacrylonitrile. Sakata at column 5, lines 8-18 states:

> The content of the olefinically unsaturated nitrile monomer unit (A) formed by Monomer (a) is 55 to 80 wt %, preferably 55 to 75 wt % based on 100 wt % of the total of the monomer unit (A) and the conjugated diene monomer unit (B) formed by Monomer (b) in view of the repeating unit constituting the NBR-typed rubber. The content of the monomer unit (A) less than 55 wt % results in a requirement of a large amount of the NBR-typed rubber to be blended with other polymer for improving the oil resistance or the like of a rubber product, and leads to a reduction in the weather resistance or the like.

As a result, Sakata teaches away from a content of α,β-ethylenically unsaturated nitrile monomer units of 28 to 50 wt%.

A prior art reference must be considered in its entirety, i.e., as a *whole*, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983). A *prima facie* case of obviousness may also be rebutted by showing that the art, in any material respect, teaches away from the invention. *In re Geisler*, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed. Cir. 1997).

Further, Sakata fails to disclose the graft copolymer (D) such as is described in the present invention. As a result, Sakata would fail to have the flexing fatigue resistance, such as is found in the present invention. The Examiner unequivocally admits to this failure of Sakata to disclose the graft copolymer (D) in paragraph 13 of the Office Action. The Examiner then turns to Peascoe to address the deficiencies of Sakata.

However, Peascoe fails to disclose a rubber composition that includes the copolymer rubber (A), (B) and (C), such as is set forth in claim 1 of the present invention.

In contrast, the present invention provides a rubber composition having excellently balanced ozone resistance, flexing fatigue resistance and oil resistance, by including the graft copolymer (D) together with copolymer rubber (A), copolymer rubber (B) and copolymer rubber (C), where the copolymer rubber (A) has α,β-ethylenically unsaturated nitrile monomer units of 28 to 50 wt%. These results can be readily observed in Table 1 at page 37 of the specification. The present invention therefore shows unexpected results over Sakata and Peascoe.

As a result, one having ordinary skill in the art would not be motivated by Sakata and Peascoe to produce claim 1 of the present invention, especially in light of Sakata teaching away from the copolymer rubber (A) having α,β-ethylenically unsaturated nitrile monomer units of 28 to 50 wt%. A *prima facie* case of obviousness has not been made. Claims depending upon claim 1 are patentable for at least the above reasons. Further, the observed properties of the invention, such as ozone and flexing fatigue resistance, demonstrate unexpected results that would rebut any obviousness that could be alleged.

This rejection is overcome and withdrawal thereof is respectfully requested.

Foreign Priority

The Examiner is respectfully requested to acknowledge foreign priority in the next official action.

Conclusion

The Examiner's rejection has been overcome, obviated or rendered moot. No issues remain. The Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert E. Goozner, Ph.D. (Reg. No. 42,593) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petitions for a one (1) month extension of time for filing a reply in connection with the present application, and the required fee of $120.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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(Monday)

R. Cm

Respectfully submitted,

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